

# **Exhibit H**

1  
2 IN THE UNITED STATES DISTRICT COURT  
3 FOR THE SOUTHERN DISTRICT OF NEW YORK  
4 Case No. 1:20-cv-01106-LGS

5 -----x

6 KEWAZINGA CORP.,

7 Plaintiff,

8 -against-

9 GOOGLE, LLC,

10 Defendant.

11 -----x

12 November 16, 2020

10:11 a.m.

13  
14  
15 Remote Videotaped Deposition  
16 of JEFFREY LUBIN, an Expert Witness in  
17 the above-entitled action, located in  
18 Princeton, New Jersey, taken Via Zoom  
19 before Dawn Matera, a Shorthand Reporter  
20 and Notary Public.

21 \* \* \*

22  
23  
24  
25 Job No. CS4338777

<p style="text-align: right;">Page 2</p> <p>1 2 A P P E A R A N C E S : 3 4 STROOCK STROOCK &amp; LAVAN LLP Attorneys for Plaintiff 5 180 Maiden Lane New York, New York 10038 6 (212)806-5400 7 By: SAUNAK DESAI, ESQ. sdesai@stroock.com 8 IAN DiBERNARDO, ESQ. idibernardo@stroock.com 9 10 DESMARAIIS LLP Attorneys for Defendant 11 101 California Street San Francisco, California 94111 12 (415)573-1806 13 14 By: EMILY CHEN, ESQ. echen@desmarais.com AMEET MODI, ESQ. 15 emodi@desmarais.com DAVID FREY, ESQ. 16 dfrey@desmarais.com 17 18 Also Present: 19 JONATHAN POPHAM, Videographer 20 ~oOo~ 21 22 23 24 25</p>	<p style="text-align: right;">Page 4</p> <p>1 Lubin 2 THE VIDEOGRAPHER: Good morning. 3 We are going on the record at 4 a.m. on November 16th, 2020. Please 5 note the microphones are sensitive and 6 may pick up whispering, private 7 conversations and cellular 8 interference. Audio and video 9 recording will continue until all 10 parties agree to go off the record. 11 This is media number 1 of the 12 video deposition of Dr. Jeffrey Lubin 13 taken by counsel for defendant in the 14 matter of Kewazinga Corporation versus 15 Google, LLC filed in the United States 16 District Court for the Southern 17 District of New York, case number 18 1:20-cv-01106-LGS. 19 This deposition is being held at 20 multiple locations via 21 videoconference. My name is Jonathan 22 Popham from Veritext and I am the 23 videographer. The court reporter is 24 Dawn Matera, also from Veritext. 25 I am not authorized to</p>
<p style="text-align: right;">Page 3</p> <p>1 2 STIPULATIONS 3 IT IS HEREBY STIPULATED AND AGREED, by 4 and among counsel for the respective 5 parties hereto, that the filing, sealing 6 and certification of the within 7 deposition shall be and the same are 8 hereby waived; 9 IT IS FURTHER STIPULATED AND AGREED 10 that all objections, except as to form of 11 the question, shall be reserved to the 12 time of the trial; 13 IT IS FURTHER STIPULATED AND AGREED 14 that the within deposition may be signed 15 before any Notary Public with the same 16 force and effect as if signed and sworn 17 to before the Court. 18 * * * 19 20 21 22 23 24 25</p>	<p style="text-align: right;">Page 5</p> <p>1 Lubin 2 administer an oath. I am not related 3 to any party in this action, nor am I 4 financially interested in the outcome. 5 Counsel will now please state 6 their appearances and affiliations for 7 the record. 8 MR. DESAI: On behalf of 9 plaintiff Kewazinga Corp., this is 10 Stroock Stroock &amp; Lavan. And also on 11 the line on behalf of Kewazinga Corp. 12 is Ian DiBernardo, also of Stroock &amp; 13 Stroock &amp; Lavan. 14 MS. CHEN: Good morning. This 15 is Emily Chen representing Google, 16 Inc. with the law firm of Desmarais 17 LLP. With me on the line are my 18 colleagues Ameet Modi and David Frey. 19 THE VIDEOGRAPHER: Okay. Anyone 20 else? 21 If that's everyone, will the 22 court reporter please swear in the 23 witness. 24 J E F F R E Y L U B I N, having been 25 first duly sworn by Dawn Matera, a Notary</p>

<p style="text-align: right;">Page 46</p> <p>1 Lubin</p> <p>2 MR. DESAI: Objection to the</p> <p>3 form.</p> <p>4 A. I arrived at that by reviewing</p> <p>5 some of the materials in the patents and</p> <p>6 understanding what kinds of techniques</p> <p>7 were being used there and relating it</p> <p>8 back to my education and my previous</p> <p>9 experience.</p> <p>10 Q. Did you meet your definition in</p> <p>11 1998?</p> <p>12 A. Yes, I did.</p> <p>13 Q. So you still meet your</p> <p>14 definition today, is that right?</p> <p>15 A. I hope so. Yes.</p> <p>16 Q. Do you have a bachelor's degree</p> <p>17 in computer science?</p> <p>18 A. No, I don't.</p> <p>19 Q. Do you have a bachelor's degree</p> <p>20 in computer engineering?</p> <p>21 A. I have a bachelor's degree in</p> <p>22 experimental psychology, which is, you</p> <p>23 know, in this case pretty highly related</p> <p>24 to the materials that we're talking</p> <p>25 about. So we can go down a list of all</p>	<p style="text-align: right;">Page 48</p> <p>1 Lubin</p> <p>2 A. No.</p> <p>3 Q. Do you have a postgraduate</p> <p>4 degree in computer engineering?</p> <p>5 A. No.</p> <p>6 Q. Do you have one to two years of</p> <p>7 experience in the field of computer</p> <p>8 vision?</p> <p>9 A. Yes, at least.</p> <p>10 Q. Do you have one to two years of</p> <p>11 experience in the field of image</p> <p>12 processing?</p> <p>13 A. Yes, at least.</p> <p>14 Q. So you don't have a computer</p> <p>15 engineering degree, true?</p> <p>16 A. That's true.</p> <p>17 Q. I am going to introduce another</p> <p>18 exhibit on Exhibit Share.</p> <p>19 (Exhibit 3, Dr. Keith Hannah's</p> <p>20 original and supplemental declaration</p> <p>21 submitted in connection with Microsoft</p> <p>22 case, was so marked for</p> <p>23 identification, as of this date.)</p> <p>24 Q. I am introducing as Exhibit</p> <p>25 number 3 Dr. Hannah's declaration in the</p>
<p style="text-align: right;">Page 47</p> <p>1 Lubin</p> <p>2 the computer related fields that I do not</p> <p>3 have a bachelor's degree in and I will</p> <p>4 respond appropriately to each one of</p> <p>5 those.</p> <p>6 Q. Is your bachelor's degree in</p> <p>7 experimental psychology equivalent to a</p> <p>8 computer science or a computer</p> <p>9 engineering degree?</p> <p>10 MR. DESAI: Objection to the</p> <p>11 form.</p> <p>12 A. Equivalent in what way? What</p> <p>13 do you mean equivalent?</p> <p>14 Q. I'll withdraw the question. Do</p> <p>15 you have three to five years of</p> <p>16 experience in the field of computer</p> <p>17 vision?</p> <p>18 A. Yes, at least.</p> <p>19 Q. Do you have three to five years</p> <p>20 of experience in the field of image</p> <p>21 processing?</p> <p>22 A. Yes.</p> <p>23 Q. Just for the record, do you</p> <p>24 have a postgraduate degree in computer</p> <p>25 science?</p>	<p style="text-align: right;">Page 49</p> <p>1 Lubin</p> <p>2 Microsoft litigation. Please let me know</p> <p>3 when you see it.</p> <p>4 A. Okay.</p> <p>5 Q. You reviewed Dr. Hannah's</p> <p>6 declaration, which is Exhibit 3, for this</p> <p>7 case; is that right?</p> <p>8 A. Yes, I did.</p> <p>9 Q. And you said you generally</p> <p>10 agree with his opinions in this</p> <p>11 declaration?</p> <p>12 A. Yeah, generally speaking, yes.</p> <p>13 Q. Please turn to paragraph 23 of</p> <p>14 Exhibit 3.</p> <p>15 A. Okay.</p> <p>16 Q. Do you see it says that a</p> <p>17 person of ordinary skill in the art would</p> <p>18 have "a bachelor's degree in computer</p> <p>19 science, computer engineering or the</p> <p>20 equivalent, and three to five years of</p> <p>21 experience in the field of computer</p> <p>22 vision, image processing or a</p> <p>23 postgraduate degree in computer science,</p> <p>24 computer engineering or the equivalent,</p> <p>25 and one to two years of experience in the</p>

<p style="text-align: right;">Page 50</p> <p>1 Lubin</p> <p>2 field of computer vision or image</p> <p>3 processing or equivalent experience."</p> <p>4 A. Yes, I see that.</p> <p>5 Q. Your definition of a person of</p> <p>6 ordinary skill in the art is different</p> <p>7 from Dr. Hannah's; is that right?</p> <p>8 MR. DESAI: Objection to form.</p> <p>9 A. No, I don't think it's</p> <p>10 different. You know, he's talking about</p> <p>11 computer science, computer engineering or</p> <p>12 the equivalent. And I'm expressing in my</p> <p>13 definition what some of those</p> <p>14 equivalences are.</p> <p>15 Q. The words of your definition</p> <p>16 are different from the words of</p> <p>17 Dr. Hannah's; is that fair?</p> <p>18 A. Some of them, yes. Many of</p> <p>19 them, yes.</p> <p>20 Q. Dr. Hannah's definition</p> <p>21 requires a degree in computer science,</p> <p>22 computer engineering or the equivalent,</p> <p>23 right?</p> <p>24 A. Yes. But what I am referring</p> <p>25 to here is the equivalent. So if I can</p>	<p style="text-align: right;">Page 52</p> <p>1 Lubin</p> <p>2 MR. DESAI: Objection to form.</p> <p>3 A. I looked at it. I wouldn't say</p> <p>4 I reviewed it with the purpose of</p> <p>5 modifying it. I looked at it and</p> <p>6 understood it and I understand my own</p> <p>7 construction which, again, is really</p> <p>8 just, I think, perhaps a different</p> <p>9 emphasis and a clarification of what he</p> <p>10 was talking about. So I don't see them</p> <p>11 as inconsistent.</p> <p>12 Q. And you reviewed Dr. Hannah's</p> <p>13 definition of a person of ordinary skill</p> <p>14 in the art for the purpose of</p> <p>15 understanding it, is that fair?</p> <p>16 MR. DESAI: Objection to the</p> <p>17 form.</p> <p>18 A. For the purpose of</p> <p>19 understanding what he was saying. I did</p> <p>20 not rely on it in any way to formulate my</p> <p>21 own opinion.</p> <p>22 Q. Why did you change the</p> <p>23 definition of person of ordinary skill in</p> <p>24 the art from Dr. Hannah's definition?</p> <p>25 MR. DESAI: Objection to form.</p>
<p style="text-align: right;">Page 51</p> <p>1 Lubin</p> <p>2 just unpack that for a moment, the work I</p> <p>3 did in my bachelor's degree involved</p> <p>4 things that are often taken to be done in</p> <p>5 computer science or computer engineering.</p> <p>6 It was about understanding and modeling</p> <p>7 human visual perceptual processes, which</p> <p>8 are the same goals of the more related</p> <p>9 aspects of computer science and computer</p> <p>10 engineering.</p> <p>11 In fact, for the materials in</p> <p>12 this case or at least in the claim</p> <p>13 construction, most of what's done in</p> <p>14 computer science and computer engineering</p> <p>15 is not relevant, and really the only</p> <p>16 parts that are relevant are the parts</p> <p>17 that overlap with the things that I have</p> <p>18 done in the equivalent fields in my</p> <p>19 undergraduate and graduate career. So</p> <p>20 that's why I don't think it's</p> <p>21 inconsistent.</p> <p>22 Q. Did you review Dr. Hannah's</p> <p>23 definition of a person of ordinary skill</p> <p>24 in the art before coming up with your</p> <p>25 own?</p>	<p style="text-align: right;">Page 53</p> <p>1 Lubin</p> <p>2 A. I assessed what I believed</p> <p>3 would be required to understand and opine</p> <p>4 on his definition and I used my version</p> <p>5 of what that meant.</p> <p>6 THE COURT REPORTER: Sorry,</p> <p>7 Dr. Lubin, you broke up a little bit.</p> <p>8 (Record read.)</p> <p>9 MS. CHEN: Ms. Court Reporter,</p> <p>10 can you read the question back,</p> <p>11 please.</p> <p>12 (Record read.)</p> <p>13 MR. DESAI: With that question</p> <p>14 pending, I will object to form.</p> <p>15 A. Again, I think it's</p> <p>16 mischaracterizing to say that I changed</p> <p>17 it. I was merely clarifying it. Again,</p> <p>18 computer engineering, computer science,</p> <p>19 from what I have seen of those curricula,</p> <p>20 involve mostly, you know, architectures,</p> <p>21 languages, hardware, it really has</p> <p>22 nothing to do with the matters at hand</p> <p>23 here.</p> <p>24 So I was further specifying and</p> <p>25 clarifying what aspects of computer</p>

<p style="text-align: right;">Page 54</p> <p>1 Lubin</p> <p>2 science or computer engineering would be</p> <p>3 required to be a person of ordinary skill</p> <p>4 in the art in this case. And that's what</p> <p>5 I attempted to do in my definition.</p> <p>6 Q. So you reviewed Dr. Hannah's</p> <p>7 definition and rephrased it in a way that</p> <p>8 you thought was more appropriate, true?</p> <p>9 MR. DESAI: Objection to form.</p> <p>10 A. I looked at it. I understood</p> <p>11 what he was talking about. I then went</p> <p>12 off and decided what I believed was a</p> <p>13 person of ordinary skill in the art, and</p> <p>14 I -- and that's what, that's what you see</p> <p>15 before you.</p> <p>16 Q. Okay. I will move on to the</p> <p>17 more meaty discussion of the claim</p> <p>18 construction terms, if that's all right</p> <p>19 with you.</p> <p>20 A. That sounds fine.</p> <p>21 Q. In your opinion is the term</p> <p>22 "array of cameras" unambiguous?</p> <p>23 MR. DESAI: Objection to form.</p> <p>24 A. Let me look for a moment.</p> <p>25 (Witness reviews document.)</p>	<p style="text-align: right;">Page 56</p> <p>1 Lubin</p> <p>2 cameras wherein the configuration can be</p> <p>3 created over time by moving cameras"; is</p> <p>4 that right?</p> <p>5 A. Yes.</p> <p>6 Q. And that opinion is set forth</p> <p>7 in your declaration at paragraph 47; is</p> <p>8 that right?</p> <p>9 A. Let's look.</p> <p>10 Yes.</p> <p>11 Q. In paragraph 47 you note</p> <p>12 certain claims of the '226 patent and</p> <p>13 certain claims of the '325 patent recite</p> <p>14 array of cameras. Do you see that?</p> <p>15 A. Yes.</p> <p>16 Q. Did you also rely on the '234</p> <p>17 patent or the '234 patent file history in</p> <p>18 developing your construction of the term</p> <p>19 "array of cameras"?</p> <p>20 MR. DESAI: Objection to form.</p> <p>21 A. You know, these patents tend</p> <p>22 to -- let me take a look at -- which is</p> <p>23 the '234 patent, which exhibit?</p> <p>24 Q. The '234 patent is --</p> <p>25 A. I see it, it's Exhibit C.</p>
<p style="text-align: right;">Page 55</p> <p>1 Lubin</p> <p>2 A. Just to refresh my memory.</p> <p>3 Maybe you can rephrase it. What do you</p> <p>4 mean by ambiguous here?</p> <p>5 Q. In your opinion, is the term</p> <p>6 "array of cameras" unclear?</p> <p>7 MR. DESAI: Objection to form.</p> <p>8 A. Can you try one other</p> <p>9 rephrasing perhaps.</p> <p>10 Q. Is the meaning of the term</p> <p>11 "array of cameras" clear after reviewing</p> <p>12 the patent and the file history?</p> <p>13 A. Yes.</p> <p>14 Q. In your opinion, is it</p> <p>15 necessary for the court to construe the</p> <p>16 term "array of cameras"?</p> <p>17 MR. DESAI: Objection to form.</p> <p>18 A. Is it my opinion that it's</p> <p>19 necessary for the court to construe it?</p> <p>20 I don't have an opinion on that. That's</p> <p>21 not -- I am not a lawyer.</p> <p>22 Q. And your opinion is that a</p> <p>23 person of ordinary skill in the art would</p> <p>24 understand that the term "array of</p> <p>25 cameras" refers to "a configuration of</p>	<p style="text-align: right;">Page 57</p> <p>1 Lubin</p> <p>2 THE COURT REPORTER: Exhibit?</p> <p>3 MS. CHEN: C as in cat.</p> <p>4 A. Give me a moment, please.</p> <p>5 Q. Sure.</p> <p>6 (Witness reviews document.)</p> <p>7 A. Just repeat the question one</p> <p>8 more time, please.</p> <p>9 Q. The question is, did you also</p> <p>10 rely on the '234 patent or the '234</p> <p>11 patent file history in developing your</p> <p>12 construction of the term "array of</p> <p>13 cameras"?</p> <p>14 MR. DESAI: Objection to form.</p> <p>15 A. I certainly looked at it. I</p> <p>16 wouldn't say I relied on it. And, you</p> <p>17 know, the example in here was just that,</p> <p>18 an example. So it's not saying one way</p> <p>19 or the other whether it was material in</p> <p>20 the '234 patent that is also applicable.</p> <p>21 Q. And what do you mean by the</p> <p>22 "example in here"?</p> <p>23 A. Well, just that claims -- the</p> <p>24 beginning of that sentence in paragraph</p> <p>25 47, "Array of cameras," I can't say</p>

15 (Pages 54 - 57)

<p style="text-align: right;">Page 174</p> <p>1 Lubin</p> <p>2 you know, be putting different arrays in</p> <p>3 place and then you would, you realize</p> <p>4 that at some point you need the array,</p> <p>5 the next ring to be closer, and you would</p> <p>6 put it there.</p> <p>7 So, you know, as far as any</p> <p>8 individual ring of or cylinder of cameras</p> <p>9 in this particular embodiment, how would</p> <p>10 you know -- I guess I forgot what your</p> <p>11 question is, I'm sorry.</p> <p>12 Q. How would you know that the</p> <p>13 cylinder is complete?</p> <p>14 A. How would you know that you</p> <p>15 have a single cylinder in place?</p> <p>16 Q. No. A cylinder could be</p> <p>17 composed -- strike that.</p> <p>18 A cylinder array, as in claim</p> <p>19 Figure 11, could be composed of any</p> <p>20 number of cameras, right? There is no</p> <p>21 limitation on how many cameras are</p> <p>22 required to form the cylindrical array,</p> <p>23 right?</p> <p>24 MR. DESAI: Objection to form.</p> <p>25 A. There is no a priori limit.</p>	<p style="text-align: right;">Page 176</p> <p>1 Lubin</p> <p>2 A. Well, it's not specified. And</p> <p>3 I don't think it has to be specified who</p> <p>4 decides.</p> <p>5 So can you ask me the question</p> <p>6 you're getting at someplace along the</p> <p>7 way, because I'm not sure that that one</p> <p>8 is -- I am not understanding it.</p> <p>9 Q. Is there any way to know when</p> <p>10 an array is complete?</p> <p>11 MR. DESAI: Objection to form.</p> <p>12 A. Well, there is lots of ways to</p> <p>13 know. I think that's my point. It</p> <p>14 depends on why you're constructing the</p> <p>15 array in the first place and what the</p> <p>16 environment is.</p> <p>17 And, you know, one, if</p> <p>18 you've -- you know, there is certainly</p> <p>19 rules of thumb for particular scenarios,</p> <p>20 but it differs a lot from one application</p> <p>21 to the next.</p> <p>22 Q. In a situation where a camera</p> <p>23 is moved over time, it's up to the camera</p> <p>24 operator to determine when to stop and</p> <p>25 therefore create the array, right?</p>
<p style="text-align: right;">Page 175</p> <p>1 Lubin</p> <p>2 It's, you know, functionally, practically</p> <p>3 speaking, you would not want to use more</p> <p>4 cameras than you need.</p> <p>5 Q. How do you know when you've</p> <p>6 used the right number of cameras?</p> <p>7 MR. DESAI: Objection to form.</p> <p>8 A. There is, you know, various</p> <p>9 different ways of determining that.</p> <p>10 And again, it depends on the</p> <p>11 environment and the application. The</p> <p>12 amount of resolution that you need. The</p> <p>13 fields of views of the camera. The</p> <p>14 number of pixels of each camera. Whether</p> <p>15 you want to increase the resolution by</p> <p>16 having more cameras look at a single</p> <p>17 point.</p> <p>18 There are lots and lots of</p> <p>19 reasons that you would want to use more</p> <p>20 or fewer cameras. So I can't really</p> <p>21 answer that in general.</p> <p>22 Q. The camera operator decides</p> <p>23 when to stop adding cameras to operate</p> <p>24 the array, correct?</p> <p>25 MR. DESAI: Objection to form.</p>	<p style="text-align: right;">Page 177</p> <p>1 Lubin</p> <p>2 MR. DESAI: Same objection.</p> <p>3 A. Same answer. You know, it</p> <p>4 depends. There is no difference, as I've</p> <p>5 been testifying in numerous moments</p> <p>6 throughout this day, that from the point</p> <p>7 of view of constructing the array of</p> <p>8 cameras, there is no difference between</p> <p>9 how you treat, you know, a single camera</p> <p>10 versus a set of different cylinders, for</p> <p>11 example.</p> <p>12 So, you know, one way to say</p> <p>13 that you've gotten enough views is if</p> <p>14 you've completely traversed the</p> <p>15 environment that you set out to traverse</p> <p>16 in creating the virtual or telepresence</p> <p>17 environment. If you traversed that</p> <p>18 entire environment and know, because you</p> <p>19 know your cameras, what is the overlap of</p> <p>20 the fields of view, then, you know, you</p> <p>21 can say I do have enough, I do have</p> <p>22 enough elements in that array and I am</p> <p>23 done.</p> <p>24 You can also go back and say,</p> <p>25 oh, wow, this one camera didn't work, so</p>



<p style="text-align: right;">Page 178</p> <p>1 Lubin</p> <p>2 let me put another camera in there and</p> <p>3 even by itself, have it, you know,</p> <p>4 re-traverse the path that it was supposed</p> <p>5 to be on.</p> <p>6 And that would count, too, as</p> <p>7 an element of that single array of</p> <p>8 cameras or, you know, of cameras being,</p> <p>9 of knowing when you had enough.</p> <p>10 I am just trying to give you</p> <p>11 different examples that show that it's</p> <p>12 not a question that you can ask</p> <p>13 generally -- I mean, that you can answer</p> <p>14 generally.</p> <p>15 Q. From a time perspective,</p> <p>16 whether you have an array of cameras</p> <p>17 depends on when the camera operator</p> <p>18 decides to stop moving the camera to</p> <p>19 different positions, right?</p> <p>20 MR. DESAI: Objection to form.</p> <p>21 Asked and answered.</p> <p>22 A. If you're not -- if you're not</p> <p>23 creating any more positions for that one</p> <p>24 camera, then you're done.</p> <p>25 Q. Is array of cameras one of</p>	<p style="text-align: right;">Page 180</p> <p>1 Lubin</p> <p>2 are, have a known relation to each other,</p> <p>3 and, you know, that would be it.</p> <p>4 Q. In your declaration, can you</p> <p>5 please turn to paragraph 48.</p> <p>6 A. Okay.</p> <p>7 Q. You see paragraph 48 goes onto</p> <p>8 page 23, do you see that you cite the</p> <p>9 definition of "array" from Random House</p> <p>10 Webster's College Dictionary, 1991.</p> <p>11 A. Yes, I do.</p> <p>12 Q. Do you see that it says --</p> <p>13 strike that.</p> <p>14 A. 1991.</p> <p>15 Q. Yes. 1991. Do you see that</p> <p>16 you opine your "construction is</p> <p>17 consistent with the definition of 'array'</p> <p>18 (i.e. 'regular order or arrangement')"?</p> <p>19 A. Yes.</p> <p>20 Q. What does it mean to have a</p> <p>21 regular order or arrangement?</p> <p>22 MR. DESAI: Objection to form.</p> <p>23 A. In this context it means that</p> <p>24 you can index your way through that array</p> <p>25 and, you know, find your way to different</p>
<p style="text-align: right;">Page 179</p> <p>1 Lubin</p> <p>2 those things where it depends on the use</p> <p>3 and other factors, so you know it when</p> <p>4 you see it?</p> <p>5 MR. DESAI: Objection to the</p> <p>6 form. Vague.</p> <p>7 A. Well, as I already testified,</p> <p>8 you know, an array of cameras, you can</p> <p>9 set up an array of cameras that will be</p> <p>10 more or less adequate for a particular</p> <p>11 application. And so I think that's the</p> <p>12 best that I can answer.</p> <p>13 If you want to try a more</p> <p>14 specific question, I can try to answer</p> <p>15 it.</p> <p>16 Q. Is camera one at location A and</p> <p>17 camera two at location B -- strike that.</p> <p>18 Is camera one at location A on</p> <p>19 December 1st and camera two at location B</p> <p>20 on January 1st an array of cameras?</p> <p>21 A. I think I've already answered</p> <p>22 that. But, you know, it depends on the</p> <p>23 application. If they meet the</p> <p>24 requirements that I've laid out in the</p> <p>25 claim construction, then, yes, if they</p>	<p style="text-align: right;">Page 181</p> <p>1 Lubin</p> <p>2 nodes of the array in a, you know,</p> <p>3 regular, fully specifiable process.</p> <p>4 So, you know, just looking at</p> <p>5 array coordinates is the standard, most</p> <p>6 typical, way of doing that. When you go</p> <p>7 to a node that is at a particular array</p> <p>8 coordinate, that is fully specifying</p> <p>9 where you are in the array.</p> <p>10 Q. And what do you mean -- strike</p> <p>11 that.</p> <p>12 What does "regular" mean in</p> <p>13 this context?</p> <p>14 MR. DESAI: Objection to form.</p> <p>15 A. I believe it means what I just</p> <p>16 said. It means that it is -- it is an</p> <p>17 order in which you can find your way</p> <p>18 around to the different nodes.</p> <p>19 Q. Does regular in this context</p> <p>20 mean uniformed intervals?</p> <p>21 MR. DESAI: Objection to form.</p> <p>22 A. No. There is no requirement,</p> <p>23 you know, in the way the array is used by</p> <p>24 the other elements of the patents that</p> <p>25 would require a uniform distance between</p>



<p style="text-align: right;">Page 194</p> <p>1 Lubin</p> <p>2 tools that are used in mosaicing, but I,</p> <p>3 you know, I didn't -- I never worked on</p> <p>4 mosaicing myself.</p> <p>5 Q. Are you familiar with Dr. Teddy</p> <p>6 Kumar?</p> <p>7 A. Yes, I am. He's my boss, my</p> <p>8 boss's boss.</p> <p>9 Q. Do you know if Dr. Kumar has</p> <p>10 worked on mosaicing?</p> <p>11 A. I don't know for sure.</p> <p>12 Q. Do you know Dr. Burt?</p> <p>13 A. Yes, I do.</p> <p>14 Q. Do you know if Dr. Burt has</p> <p>15 worked on mosaicing?</p> <p>16 A. Well, I know of his patent in</p> <p>17 the area, so yes.</p> <p>18 Q. Did you discuss Dr. Burt's</p> <p>19 patent on mosaicing with him?</p> <p>20 A. No.</p> <p>21 Q. Have you discussed mosaicing</p> <p>22 with Dr. Burt?</p> <p>23 A. No, I am pretty sure I didn't.</p> <p>24 But I can't absolutely say that over the</p> <p>25 course of 30 years it didn't ever come up</p>	<p style="text-align: right;">Page 196</p> <p>1 Lubin</p> <p>2 Q. And do you also see about 10</p> <p>3 lines later in the same paragraph you</p> <p>4 say, "As of result, navigation through</p> <p>5 the array is not limited to one physical</p> <p>6 camera, but rather includes navigation of</p> <p>7 camera outputs."</p> <p>8 Do you see that?</p> <p>9 A. Yes.</p> <p>10 Q. And do you see that the</p> <p>11 following sentence is a quote from the</p> <p>12 '226 patent at column 4, lines 26 through</p> <p>13 29, "The system allows the viewer to</p> <p>14 float between a multiplicity of</p> <p>15 microcamera outputs in a way that (via</p> <p>16 electronic switching processes and thus</p> <p>17 movement through the array) merges their</p> <p>18 fields of view into a seamless motion</p> <p>19 path."</p> <p>20 Do you see that?</p> <p>21 A. Yes, I do.</p> <p>22 Q. So do you agree that the claim</p> <p>23 system allows the user to merge the</p> <p>24 fields of view of multiple microcamera</p> <p>25 outputs into a seamless motion path?</p>
<p style="text-align: right;">Page 195</p> <p>1 Lubin</p> <p>2 in conversation. But I don't recall any</p> <p>3 time that it did.</p> <p>4 Q. I would like to direct you</p> <p>5 paragraph 23 of your report. Please let</p> <p>6 me know when you see it.</p> <p>7 THE COURT REPORTER: Can I take</p> <p>8 a quick break?</p> <p>9 (Off the record.)</p> <p>10 THE VIDEOGRAPHER: We are back</p> <p>11 on the record at 4:26 p.m.</p> <p>12 BY MS. CHEN:</p> <p>13 Q. So I think we were just at</p> <p>14 paragraph 23 of your report, Dr. Lubin.</p> <p>15 Do you still have that open?</p> <p>16 A. Yes, I do.</p> <p>17 Q. In this paragraph you describe</p> <p>18 that "The user interface devices allow</p> <p>19 each user to navigate through the array</p> <p>20 and thus through the environment by</p> <p>21 viewing camera outputs stored at</p> <p>22 particular locations in memory, also</p> <p>23 referred to as nodes."</p> <p>24 Do you see that?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 197</p> <p>1 Lubin</p> <p>2 MR. DESAI: Objection to form.</p> <p>3 A. I agree that in many cases it</p> <p>4 is desirable to have -- well, let me say</p> <p>5 one thing.</p> <p>6 There is a distinction I think</p> <p>7 between a seamless motion path and a</p> <p>8 seamless composition of images. A</p> <p>9 seamless -- in all of these cases it is a</p> <p>10 perceptual thing; seamless with respect</p> <p>11 to the beholder. And when you're</p> <p>12 thinking about a motion path, that's a</p> <p>13 different -- that's a different kind of</p> <p>14 seamlessness in my opinion.</p> <p>15 And by the way, I have a very</p> <p>16 strong background in perception. That's</p> <p>17 actually what my degree is in. So a</p> <p>18 seamless motion path is really about</p> <p>19 having a motion that it's not -- there</p> <p>20 are no abrupt transitions. It doesn't</p> <p>21 refer to seamlessness in the way that I</p> <p>22 think some embodiments of the patent</p> <p>23 refer to, if you're getting into that.</p> <p>24 Q. Thank you. I see.</p> <p>25 So a seamless motion path in</p>

<p style="text-align: right;">Page 198</p> <p>1 Lubin</p> <p>2 your opinion is different from the</p> <p>3 seamlessness that's described in the Burt</p> <p>4 patent; is that fair?</p> <p>5 A. It's different than some of the</p> <p>6 descriptions in there, yes.</p> <p>7 Q. How so?</p> <p>8 A. Well, as I've already said,</p> <p>9 the -- when you're trying to -- you know,</p> <p>10 seamlessness is, since it's a perceptual</p> <p>11 issue, there is no absolute seamlessness,</p> <p>12 and so it's really a question of, you</p> <p>13 know, to what extent it is to interfere</p> <p>14 with the task at end.</p> <p>15 And if the task at end is</p> <p>16 navigating through an environment, there</p> <p>17 is different requirements. You do not</p> <p>18 want to have things jump at one moment to</p> <p>19 the next, perhaps. But, you know, it's,</p> <p>20 I would say, a less stringent requirement</p> <p>21 than seamlessness in images.</p> <p>22 Q. So I can't recall the exact</p> <p>23 term, but is there a way to quantify a</p> <p>24 person's ability to perceive changes,</p> <p>25 small changes?</p>	<p style="text-align: right;">Page 200</p> <p>1 Lubin</p> <p>2 seamlessness. In anything that's</p> <p>3 consumed by the human visual system, it,</p> <p>4 you know, it's a relative thing.</p> <p>5 Q. For the record, could you spell</p> <p>6 the name of your coauthor on that paper?</p> <p>7 A. Yeah, it's Gerald, G-E-R-A-L-D,</p> <p>8 Alfonse, A-L-P-H-O-N-S-E.</p> <p>9 And maybe just to telegraph a</p> <p>10 little bit, you know, there is certainly</p> <p>11 no requirement for seamlessness at all in</p> <p>12 mosaicing, and in fact, in some</p> <p>13 applications you specifically do not want</p> <p>14 any kind of attempt to blur the seam.</p> <p>15 For example, in the aerial</p> <p>16 image, you know, analysis example that I</p> <p>17 gave before the break, where these image</p> <p>18 analysts are looking at satellite images</p> <p>19 and they are lined up so that they are</p> <p>20 more or less matching, they don't want</p> <p>21 anything to be done to remove any</p> <p>22 information to obstruct or distort any</p> <p>23 information at all in these images, even</p> <p>24 at what's not only on the edges between,</p> <p>25 between these different plates or what do</p>
<p style="text-align: right;">Page 199</p> <p>1 Lubin</p> <p>2 A. Yes, in fact a lot of my early</p> <p>3 work at Sarnoff was about that. One unit</p> <p>4 is called the adjust noticeable</p> <p>5 difference.</p> <p>6 And actually I did an analysis,</p> <p>7 I wrote a paper with another guy named</p> <p>8 Gerry Alphonse, I don't know if I</p> <p>9 included it in my CV, but it was about</p> <p>10 perceptual requirements of seamlessness</p> <p>11 in tiled large-screen displays. And it</p> <p>12 started out from the perspective that</p> <p>13 there is no such thing as complete</p> <p>14 seamlessness, because there is a seam</p> <p>15 between those displays. The question is</p> <p>16 how close do they have to be for it to</p> <p>17 not bother.</p> <p>18 And it's certainly subjective</p> <p>19 in a lot of ways, so that if you want to</p> <p>20 just really not ever be able to see that</p> <p>21 there is a seam, that is a much more</p> <p>22 stringent J&amp;D requirement than just</p> <p>23 having it be not objectionable.</p> <p>24 And so, you know, that's how</p> <p>25 I've always viewed the idea of</p>	<p style="text-align: right;">Page 201</p> <p>1 Lubin</p> <p>2 they call them, these images.</p> <p>3 So, you know, in that case, and</p> <p>4 also, you know, it helps you understand</p> <p>5 where you are in the collection of images</p> <p>6 for people to see some edges between</p> <p>7 them. You know, some see where one</p> <p>8 starts and the other ends. And so that</p> <p>9 is certainly an example of mosaicing and</p> <p>10 yet there is no requirement for</p> <p>11 seamlessness. In fact, there is a</p> <p>12 requirement for not seamlessness in those</p> <p>13 applications.</p> <p>14 And so my opinion of whether or</p> <p>15 not mosaicing has to include any attempt</p> <p>16 to make things seamless is really</p> <p>17 informed by those kinds of applications</p> <p>18 and in my experience.</p> <p>19 Q. In this example of aerial</p> <p>20 imagery, when the mosaic is being put</p> <p>21 together, do they also go through what</p> <p>22 the Burt patent describes as the mosaic</p> <p>23 composition process?</p> <p>24 MR. DESAI: Objection to form.</p> <p>25 A. There is the alignment process</p>

<p style="text-align: right;">Page 206</p> <p>1 Lubin</p> <p>2 the seams, and to that extent, it's not</p> <p>3 needed.</p> <p>4 I not saying that you don't</p> <p>5 want to do image processing for other</p> <p>6 reasons, but to answer the question about</p> <p>7 seamlessness, I opine and firmly believe</p> <p>8 that it's not required.</p> <p>9 Q. In Burt, your opinion is that</p> <p>10 seam reduction imaging processing is</p> <p>11 optional and not required; is that fair?</p> <p>12 MR. DESAI: Objection to form.</p> <p>13 A. Yes.</p> <p>14 Q. In Burt, if there is seam</p> <p>15 reduction image processing, that would</p> <p>16 take place during the composition</p> <p>17 process; is that right?</p> <p>18 MR. DESAI: Same objection.</p> <p>19 A. Let me just check, okay? Which</p> <p>20 exhibit is the Burt patent?</p> <p>21 Q. It's Exhibit F.</p> <p>22 A. F, thank you.</p> <p>23 Q. And for the record, I am</p> <p>24 referring to the Burt patent, which is</p> <p>25 Exhibit F to Dr. Lubin's declaration, and</p>	<p style="text-align: right;">Page 208</p> <p>1 Lubin</p> <p>2 MR. DESAI: Same objection.</p> <p>3 A. I would say that certainly it</p> <p>4 is a way to try to achieve seamlessness.</p> <p>5 I think there are other reasons</p> <p>6 to do that kind of processing, perhaps;</p> <p>7 none that come to mind. But, you know,</p> <p>8 at the moment, I believe that's how he</p> <p>9 intended the meaning of those terms.</p> <p>10 Can't be absolutely sure.</p> <p>11 Q. And the Burt patent was</p> <p>12 incorporated by reference into the</p> <p>13 Kewazinga patent, right?</p> <p>14 A. Yes.</p> <p>15 Q. Earlier I believe you testified</p> <p>16 that you view there to be a distinction</p> <p>17 between a seamless motion path and a</p> <p>18 seamless mosaic, right?</p> <p>19 A. Yes, I said in general, from a</p> <p>20 perceptual perspective, that there are</p> <p>21 different desiderata in those two cases.</p> <p>22 Q. Can you repeat that?</p> <p>23 A. I don't know why I always use</p> <p>24 that word, desiderata, things that are to</p> <p>25 be -- that are desired.</p>
<p style="text-align: right;">Page 207</p> <p>1 Lubin</p> <p>2 the patent number is U.S. patent number</p> <p>3 5,649,032.</p> <p>4 A. Yeah, in enclosing the mosaic,</p> <p>5 looking at column four, starting line 41,</p> <p>6 "On the aligned images the system may use</p> <p>7 any one of a number of image fusing,</p> <p>8 merging, filtering and averaging</p> <p>9 processes to best produce a seamless</p> <p>10 mosaic."</p> <p>11 So if it were being done, it</p> <p>12 would be done in the composition process.</p> <p>13 Q. The process of producing a</p> <p>14 seamless mosaic, if it is done, is that</p> <p>15 achieved by any one of these identified</p> <p>16 processes, image fusing, merging,</p> <p>17 filtering and averaging?</p> <p>18 MR. DESAI: Objection to form.</p> <p>19 A. Is it -- is it --</p> <p>20 Q. I'll withdraw the question.</p> <p>21 Let me restate it.</p> <p>22 Is the purpose of image fusing,</p> <p>23 merging, filtering and averaging, to try</p> <p>24 to produce a seamless mosaic; is that</p> <p>25 fair?</p>	<p style="text-align: right;">Page 209</p> <p>1 Lubin</p> <p>2 D-E-S-I-D-E-R-A-T-A. I'm sorry.</p> <p>3 Q. No problem. In the context of</p> <p>4 the patents in suit, is there a conflict</p> <p>5 between the meaning of seamless motion</p> <p>6 path and seamless mosaic as used in the</p> <p>7 Burt patent?</p> <p>8 MR. DESAI: Objection to form.</p> <p>9 A. There is no conflict. There</p> <p>10 are different applications, different</p> <p>11 perceptual things you're trying to</p> <p>12 accomplish in the two cases.</p> <p>13 So in general when you're</p> <p>14 trying to have a seamless motion path, as</p> <p>15 I said earlier, that means, you know,</p> <p>16 that's, generally speaking, a less</p> <p>17 stringent requirement than trying to</p> <p>18 achieve seamlessness on an image when</p> <p>19 you're looking at it directly. You know,</p> <p>20 when you're traversing an environment,</p> <p>21 mostly things are going by on the sides.</p> <p>22 And unless there is a big abrupt change</p> <p>23 in the motion, then you won't even notice</p> <p>24 it.</p> <p>25 So from that perspective, it's</p>

<p style="text-align: right;">Page 210</p> <p>1 Lubin</p> <p>2 a less stringent requirement.</p> <p>3 Q. In the context of the Kewazinga</p> <p>4 patent --</p> <p>5 A. One other thing that I would</p> <p>6 like to add to that, is that requirement</p> <p>7 for seamless motion generally can be</p> <p>8 accomplished just by the alignment</p> <p>9 process in my experience. So there is no</p> <p>10 need to, there is no reason to do any</p> <p>11 further processing. The alignment</p> <p>12 process and just composing things as is,</p> <p>13 by itself, reduces or removes any effects</p> <p>14 of abrupt transitions between images for</p> <p>15 the purpose of motion.</p> <p>16 Q. Is it your understanding that</p> <p>17 the Kewazinga patent cites the Burt</p> <p>18 patent to explain how the images are</p> <p>19 mosaic in order to achieve a seamless</p> <p>20 motion path?</p> <p>21 MR. DESAI: Objection to form.</p> <p>22 A. There was a lot of clauses in</p> <p>23 there.</p> <p>24 Q. I'll restate the question.</p> <p>25 Why does the Kewazinga --</p>	<p style="text-align: right;">Page 212</p> <p>1 Lubin</p> <p>2 reads, "U.S. patent number 5,649,032,</p> <p>3 which is the Burt patent, discloses a</p> <p>4 system and method for generating a mosaic</p> <p>5 from a plurality of images and is hereby</p> <p>6 incorporated by reference"?</p> <p>7 A. Yes, I do.</p> <p>8 Q. So the Kewazinga patents,</p> <p>9 including this '234 patent that we are</p> <p>10 looking at now, are an improvement over</p> <p>11 Burt, right?</p> <p>12 MR. DESAI: Objection to form.</p> <p>13 A. You know, any patent is an</p> <p>14 improvement over any other patent because</p> <p>15 it adds more inventions to the world.</p> <p>16 I think that the fact that, you</p> <p>17 know, that it cites it incorporates this</p> <p>18 does not make it an improvement. It puts</p> <p>19 it off into a different direction, I</p> <p>20 guess. But it's not really my place to,</p> <p>21 you know, say whether it's an improvement</p> <p>22 or not, would probably be the best</p> <p>23 answer.</p> <p>24 Q. I'll rephrase it.</p> <p>25 Would you say the Kewazinga</p>
<p style="text-align: right;">Page 211</p> <p>1 Lubin</p> <p>2 strike that.</p> <p>3 Why does the Kewazinga patent</p> <p>4 cite Burt?</p> <p>5 MR. DESAI: Objection to form.</p> <p>6 Foundation.</p> <p>7 A. I wasn't really asked to delve</p> <p>8 into that. You know, I probably could</p> <p>9 come up with an opinion of why they cited</p> <p>10 it, but I didn't consider it and I don't</p> <p>11 feel comfortable trying to consider it</p> <p>12 right this second.</p> <p>13 Q. In the '234 patent, please turn</p> <p>14 to column 17.</p> <p>15 A. What is that?</p> <p>16 Q. That is Exhibit C to your</p> <p>17 declaration.</p> <p>18 A. '234 patent, where?</p> <p>19 Q. Column 17. Do you agree that</p> <p>20 the '234 patent at column 17, line 30,</p> <p>21 reads, "In another embodiment, mixing may</p> <p>22 be accomplished by 'mosaicing' the</p> <p>23 outputs of the intermediate cameras"?</p> <p>24 A. Yes.</p> <p>25 Q. And do you also see that it</p>	<p style="text-align: right;">Page 213</p> <p>1 Lubin</p> <p>2 patents build on what is disclosed in</p> <p>3 Burt?</p> <p>4 MR. DESAI: Objection to form.</p> <p>5 A. I mean, the Kewazinga patents</p> <p>6 use something about the Burt patent to</p> <p>7 solve a particular problem that they are</p> <p>8 addressing, navigating when you're not</p> <p>9 going directly from one camera output to</p> <p>10 the next.</p> <p>11 So that's how I would -- that's</p> <p>12 how I would describe what they are doing</p> <p>13 with the Burt patent and, I guess to</p> <p>14 answer your previous question, why they</p> <p>15 are doing it.</p> <p>16 Q. So you agree that the Kewazinga</p> <p>17 patents used the mosaicing that is</p> <p>18 described in the Burt patent as an</p> <p>19 example of how mixing is accomplished in</p> <p>20 the Kewazinga patent; is that fair to</p> <p>21 say?</p> <p>22 MR. DESAI: Objection to form.</p> <p>23 Mischaracterizes the testimony.</p> <p>24 A. I'm sorry, can you ask that</p> <p>25 again or maybe change it a little bit.</p>

<p style="text-align: right;">Page 254</p> <p>1 Lubin</p> <p>2 BY MR. DESAI:</p> <p>3 Q. I think you're already looking</p> <p>4 at your declaration. Earlier today</p> <p>5 counsel asked you a number of questions</p> <p>6 about this declaration and expert report</p> <p>7 and the analysis that you did in this</p> <p>8 case; do you remember testifying about</p> <p>9 that?</p> <p>10 A. Yeah.</p> <p>11 Q. I would like to ask you just a</p> <p>12 few more questions about the analysis</p> <p>13 that you did in this case.</p> <p>14 If you can take a look at</p> <p>15 paragraph 1 of your declaration. You see</p> <p>16 that?</p> <p>17 A. Yes.</p> <p>18 Q. You see the second sentence, "I</p> <p>19 was asked to investigate and provide my</p> <p>20 opinions regarding the interpretation of</p> <p>21 certain language in the claims of</p> <p>22 Kewazinga's United States patents</p> <p>23 6,535,226, 6,522,325 and 9,055,234"; do</p> <p>24 you see that?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 256</p> <p>1 Lubin</p> <p>2 MS. CHEN: Objection to form.</p> <p>3 A. It showed me that my -- that my</p> <p>4 claim constructions that I came up with</p> <p>5 were consistent with what I was reading</p> <p>6 in the patents.</p> <p>7 Q. Had you finalized your claim</p> <p>8 construction analysis before you reviewed</p> <p>9 the Kewazinga patents?</p> <p>10 A. No.</p> <p>11 Q. Had you finalized your claim</p> <p>12 construction opinions before reviewing</p> <p>13 the Kewazinga patents?</p> <p>14 MS. CHEN: Objection, form.</p> <p>15 Q. I think your answer got cut</p> <p>16 off. I will ask the question again.</p> <p>17 Had you finalized your claim</p> <p>18 construction opinions in this case before</p> <p>19 reviewing the Kewazinga patents?</p> <p>20 A. No.</p> <p>21 MS. CHEN: Objection, form.</p> <p>22 Q. Can you turn to paragraph 10 of</p> <p>23 your declaration.</p> <p>24 A. Okay.</p> <p>25 Q. You see that the first sentence</p>
<p style="text-align: right;">Page 255</p> <p>1 Lubin</p> <p>2 Q. Were you asked to investigate,</p> <p>3 analyze and provide opinions on claim</p> <p>4 construction at this point in the case?</p> <p>5 A. Just the meaning of those two</p> <p>6 terms, "array of cameras" and</p> <p>7 "mosaicing."</p> <p>8 Q. Can you explain a little about</p> <p>9 the analysis you did to come to your</p> <p>10 opinions on what you believe is the</p> <p>11 proper claim construction for mosaicing</p> <p>12 and array of cameras?</p> <p>13 MS. CHEN: Objection to form.</p> <p>14 A. In both cases I started with</p> <p>15 the common usage of those terms and</p> <p>16 formed it from what I understood from my</p> <p>17 work in the field, and then went into the</p> <p>18 patents themselves and decided whether or</p> <p>19 not those were consistent with what I</p> <p>20 found in the patents.</p> <p>21 Q. You said based on your review</p> <p>22 of the patents, I believe that you stated</p> <p>23 was part of your analysis; what did you</p> <p>24 find and how did that factor into your</p> <p>25 claim construction opinions in this case?</p>	<p style="text-align: right;">Page 257</p> <p>1 Lubin</p> <p>2 says, "I considered the following</p> <p>3 materials, facts and data in forming my</p> <p>4 opinions in this action," and then there</p> <p>5 is four bullet points underneath that.</p> <p>6 Do you see that in paragraph 10?</p> <p>7 A. Yes.</p> <p>8 Q. Had you finalized your claim</p> <p>9 construction analysis prior to reviewing</p> <p>10 the materials you considered in forming</p> <p>11 your opinions?</p> <p>12 MS. CHEN: Objection, form.</p> <p>13 A. No, I did not.</p> <p>14 Q. And was reviewing the materials</p> <p>15 that you identified here in paragraph 10</p> <p>16 part of your analysis to provide the</p> <p>17 opinions on claim construction that you</p> <p>18 provided in this case?</p> <p>19 A. Yes.</p> <p>20 Q. And you have provided those</p> <p>21 claim construction opinions in this case</p> <p>22 in this expert report and declaration</p> <p>23 that is Exhibit 1 at your deposition,</p> <p>24 correct?</p> <p>25 MS. CHEN: Objection. Leading.</p>

65 (Pages 254 - 257)

<p style="text-align: right;">Page 258</p> <p>1 Lubin</p> <p>2 A. Correct.</p> <p>3 Q. Do you still agree with the</p> <p>4 statements that you made in the expert</p> <p>5 report and declaration that is Exhibit 1</p> <p>6 to your deposition?</p> <p>7 MS. CHEN: Objection. Form.</p> <p>8 A. The statement in paragraph 1</p> <p>9 you said?</p> <p>10 Q. Let me clarify.</p> <p>11 I am asking you, do you agree</p> <p>12 with the statements that you made in this</p> <p>13 entirety of your expert report and</p> <p>14 declaration, which I am identifying as</p> <p>15 Exhibit 1 to your deposition?</p> <p>16 A. Oh, yes.</p> <p>17 MS. CHEN: Objection, form.</p> <p>18 Q. Do you believe that your review</p> <p>19 of the relevant intrinsic and extrinsic</p> <p>20 evidence that you reviewed in forming</p> <p>21 your opinions continue to support the</p> <p>22 opinions that you provided in your expert</p> <p>23 report and declaration that is Exhibit 1</p> <p>24 to your deposition?</p> <p>25 MS. CHEN: Objection, form.</p>	<p style="text-align: right;">Page 260</p> <p>1 Lubin</p> <p>2 Q. Kewazinga's counsel asked you</p> <p>3 questions about your process in forming</p> <p>4 opinions in this case, right?</p> <p>5 A. Yes.</p> <p>6 Q. When you were first asked to</p> <p>7 provide your opinions in this case, were</p> <p>8 you provided Kewazinga's proposed</p> <p>9 construction?</p> <p>10 MR. DESAI: Objection to form.</p> <p>11 Again, you can answer the</p> <p>12 question at a high level, but the</p> <p>13 question appears to be about</p> <p>14 conversations with counsel. So I</p> <p>15 advise you not to reveal the substance</p> <p>16 of any conversations with counsel.</p> <p>17 A. Well, I'm not sure how to</p> <p>18 answer it then.</p> <p>19 I was -- they presented me with</p> <p>20 the, I believe the Microsoft claim</p> <p>21 construction opinions. The Microsoft</p> <p>22 claim constructions. I don't recall</p> <p>23 whether or not they presented me with any</p> <p>24 draft claim constructions in this case</p> <p>25 before they -- before I started looking</p>
<p style="text-align: right;">Page 259</p> <p>1 Lubin</p> <p>2 A. Yes, I do.</p> <p>3 MR. DESAI: I pass the witness,</p> <p>4 I have no further questions of the</p> <p>5 witness.</p> <p>6 BY MS. CHEN:</p> <p>7 Q. Dr. Lubin, I just have a couple</p> <p>8 more questions for you.</p> <p>9 Earlier I asked you questions</p> <p>10 about your process in forming your</p> <p>11 opinions. Do you recall those questions?</p> <p>12 A. Yes, I do.</p> <p>13 Q. When were you first asked --</p> <p>14 strike that.</p> <p>15 When you were first asked to</p> <p>16 provide opinions in this case, were you</p> <p>17 provided Kewazinga's proposed</p> <p>18 construction?</p> <p>19 MR. DESAI: Objection to form</p> <p>20 and outside the scope of the redirect.</p> <p>21 You can answer the question at a</p> <p>22 high level, but don't reveal the</p> <p>23 substance of any communications that</p> <p>24 you had with attorneys.</p> <p>25 A. Can you repeat the question?</p>	<p style="text-align: right;">Page 261</p> <p>1 Lubin</p> <p>2 into it.</p> <p>3 Q. You considered Kewazinga's</p> <p>4 proposed constructions of the claim terms</p> <p>5 in this case before you finalized</p> <p>6 opinions, right?</p> <p>7 MR. DESAI: Objection to form.</p> <p>8 A. I believe I did. I believe</p> <p>9 there was -- I saw something along those</p> <p>10 lines.</p> <p>11 Whether or not I saw those</p> <p>12 before I started reviewing other</p> <p>13 documents, I'm not sure.</p> <p>14 Q. You considered -- as you</p> <p>15 indicated in paragraph 10 of your</p> <p>16 declaration, you considered the joint</p> <p>17 claim construction and prehearing</p> <p>18 statement, which is attached as Exhibit E</p> <p>19 to your declaration, which includes</p> <p>20 Kewazinga's proposed construction, in</p> <p>21 forming your opinions; is that right?</p> <p>22 A. Yes. Yes. That's right.</p> <p>23 Q. And then you finalized your</p> <p>24 opinions after reviewing that document,</p> <p>25 right?</p>



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1 Lubin

2 MR. DESAI: Object to the form.

3 A. Yes. Yes, I did.

4 MS. CHEN: Thank you, I pass the

5 witness.

6 MR. DESAI: A few questions.

7 BY MR. DESAI:

8 Q. There seems to be a lot of

9 confusion here about the timing of your

10 opinion. Let's just make this simple.

11 Can you turn to paragraph 41 of

12 your declaration -- 38 of your

13 declaration. Do you see it states there,

14 "A POSITA understands that this term" --

15 strike that.

16 Just read that paragraph to

17 yourself.

18 A. Okay.

19 (Witness reviews document.)

20 Q. What is your opinion on the

21 proper construction for the claim term

22 "mosaicing"?

23 MS. CHEN: Objection, form.

24 A. My opinion is, as I state here,

25 that the term refers to "creating imagery

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1 Lubin

2 assembled from a plurality of images, or

3 portions thereof, including an alignment

4 process and a composition process."

5 Q. Did you perform an analysis or

6 view any materials in coming to that

7 opinion?

8 MS. CHEN: Objection to form.

9 A. Yes.

10 Q. Did that include reviewing the

11 Kewazinga patents?

12 A. Yes.

13 Q. Do you still agree -- do you

14 still believe that, in your expert

15 opinion, that is the proper construction

16 of mosaicing as used in the Kewazinga

17 patents?

18 MS. CHEN: Objection, form.

19 A. Yes.

20 Q. Can you turn now to paragraph

21 47 of your declaration. Take a moment to

22 read that paragraph to yourself.

23 A. Okay.

24 Q. In your expert opinion, what is

25 the proper construction of "array of

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1 Lubin

2 cameras" as used in the Kewazinga

3 patents?

4 MS. CHEN: Objection to form.

5 A. As I state in paragraph 47, it

6 is a configuration of cameras wherein the

7 configuration can be created over time by

8 moving cameras.

9 Q. Did you do an analysis

10 including reviewing the Kewazinga patents

11 in coming to that opinion?

12 A. Yes.

13 MS. CHEN: Objection, form.

14 Q. And do you still believe that,

15 in your expert opinion, that that is the

16 appropriate construction of "array of

17 cameras" in this case?

18 MS. CHEN: Objection, form.

19 A. Yes.

20 MR. DESAI: I pass the witness.

21 MS. CHEN: Dr. Lubin, thank you

22 again for your time. I have no

23 further questions.

24 THE WITNESS: Thank you.

25 THE VIDEOGRAPHER: This

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1 Lubin

2 concludes today's testimony of

3 Dr. Jeffrey Lubin. We are going off

4 the record at 6:33 p.m. This also

5 concludes media 6.

6 (Time noted: 6:33 p.m.)

7 \_\_\_\_\_

8

9 Subscribed and sworn to

10 before me this \_\_\_\_ day of \_\_\_\_, 2020.

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## CERTIFICATION

I, DAWN MATERA, a Notary Public  
for and within the State of New York, do  
hereby certify:

That the witness whose testimony  
as herein set forth, was duly sworn by  
me; and that the within transcript is a  
true record of the testimony given by  
said witness.

I further certify that I am not  
related to any of the parties to this  
action by blood or marriage, and that I  
am in no way interested in the outcome of  
this matter.

IN WITNESS WHEREOF, I have  
hereunto set my hand this 19th day of  
November, 2020.

*Dawn Matera*  
DAWN MATERA

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JEFFREY LUBIN	5

## EXHIBITS

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November 20, 2020

Jeffrey Lubin  
jxlubin@gmail.com

Case Name: Kewazinga Corp. v. Google, LLC

Veritext Reference Number: 4338777

Witness: Jeffrey Lubin Deposition Date: 11/16/2020

Dear Sir/Madam:

Enclosed you will find a transcript of your deposition.

As the reading and signing have not been expressly

waived, please review the transcript and note any

changes or corrections on the jurat/errata sheet

included, indicating the page, line number, change and

reason for the change. Sign at the bottom of the sheet

in the presence of a notary except in California where

you are signing under penalty of perjury and email

the errata sheet back to us at the address shown above.

If the jurat is not received within thirty days of your receipt of

this letter, the reading and signing will be deemed waived.

Sincerely,

Production Department

Encl.

Cc: Emily Chen, Esq.

Saunak Desai, Esq.

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Kewazinga Corp. v. Google, LLC

Jeffrey Lubin

## ERRATA

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